intercom

Journal of the Air Force C4ISR community ★ October 2006

JOINT OPERATIONS

PHOTO ESSAY ★ JOINT LEADERS ★ JOINT C2

JOINT FORCES COMMAND ★ JOINT POSTAL OPS

JOINT CONNECTIVITY ★ JOINT TACTICAL RADIO

IT'S ALL ABOUT 'U.S.'

ARMY ★ NAVY ★ AIR FORCE ★ MARINES ★ COAST GUARD

Army basic training at Fort Jackson, S.C.

Senior Airman Desiree N. Palacios / 1st CTCS

These are the most committed young men and women I have ever seen. They have personal integrity above reproach.

IT'S ALL ABOUT 'U.S.'

ARMY ★ NAVY ★ AIR FORCE ★ MARINES ★ COAST GUARD

Sailors man the rails of the USS Kitty Hawk (CV 63) as it steams into Perth, Australia.

MCSN Adam York / U.S. Navy

They have the same hopes, dreams, desires, sense of loyalty and honor. They have personal courage ... and devotion to duty.

IT'S ALL ABOUT 'U.S.'

ARMY ★ NAVY ★ AIR FORCE ★ MARINES ★ COAST GUARD

Senior Airman Tamara Rhone preflights an F-15E at Mountain Home, Idaho.

Master Sgt. Scott Wagers / AFNEWS

They are as patriotic as you or I could ever be. It's a different generation ... our future generation. We should be proud of them.

IT'S ALL ABOUT 'U.S.'

ARMY ★ NAVY ★ AIR FORCE ★ MARINES ★ COAST GUARD

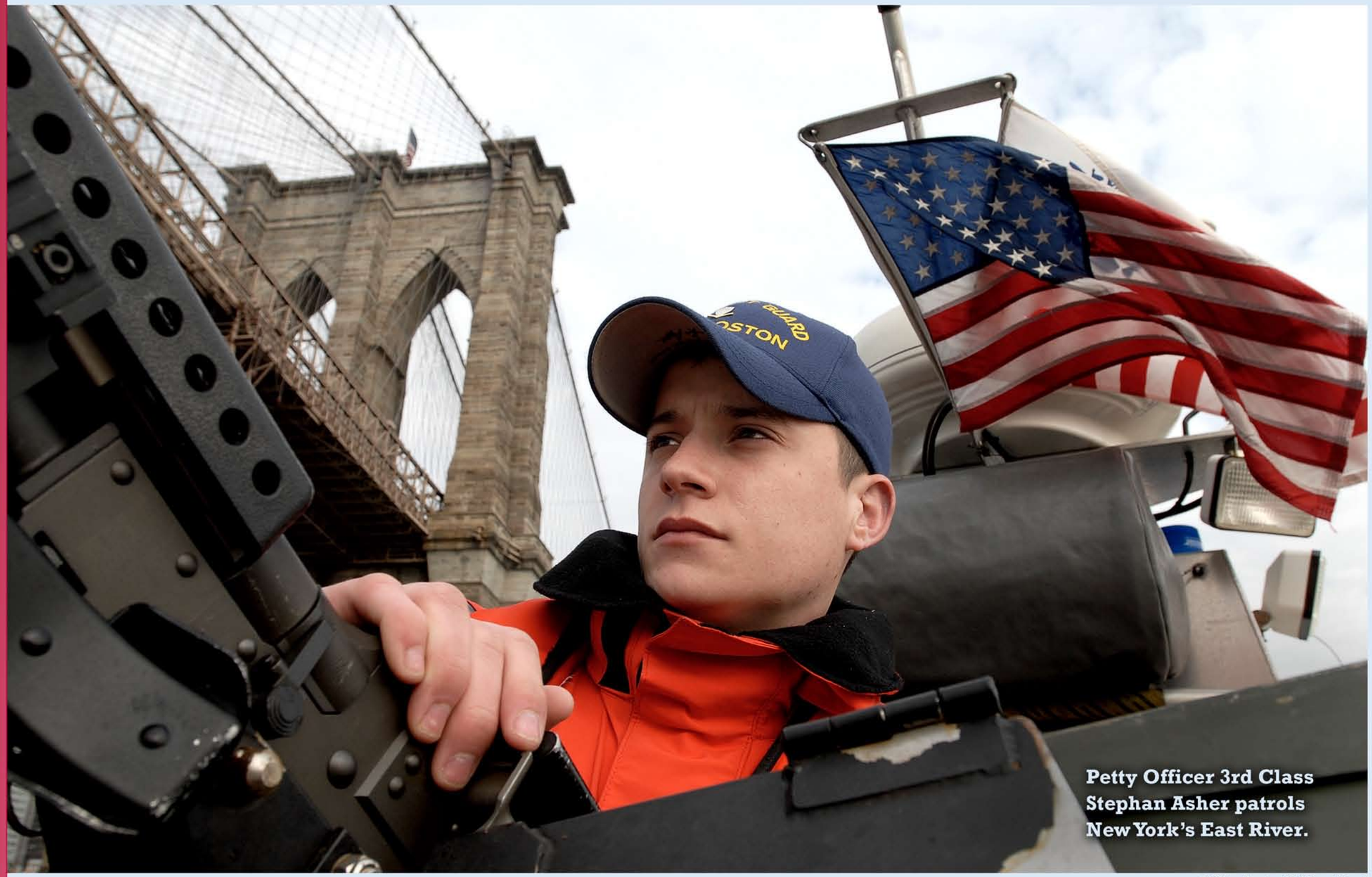
Pfc. Nick Martin provides security during an urban movement drill in Guam.

Lance Cpl. Kamran Sadaghiani / U.S. Marines

The services have far more similarities than differences. We must understand that we have one common cause.

IT'S ALL ABOUT 'U.S.'

ARMY ★ NAVY ★ AIR FORCE ★ MARINES ★ COAST GUARD



Petty Officer 3rd Class Stephan Asher patrols New York's East River.

PA3 Dan Bender / U.S. Coast Guard

(If we do things) separately, young men and women who trust us to do the right thing will pay the price.

Quotes by Command Sgt. Maj. William J. Gainey
Senior Enlisted Advisor to the Chairman, Joint Chiefs of Staff

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Online ★ public.afca.af.mil/intercom.htm

SITEMAP

OCTOBER 2006 ★ VOLUME 47, NUMBER 10

THE THEME

Cover photo: Photographer's Mate 2nd Class Aaron Burden

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THE JOURNAL OF THE AIR FORCE C4ISR COMMUNITY

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MAGAZINE AWARDS

2005
Best Magazine
DoD's Thomas Jefferson Awards program & Air Force Media Contest

Best Internal Magazine
Clarion Award * Women in Communications

2003/2004
Most Improved Magazine
Clarion Award * Women in Communications

Award of Excellence - Internal Magazine
NAGC Blue Pencil Competition

Best Online Newspaper
Air Force Media Contest

Best Designed Publication
DoD's MILGRAPH Competition

FROM THE EDITORIAL DESK — Karen Petitt

Joint ops is all about 'U.S.'

When Army Command Sgt. Major William Gainey visits the troops on behalf of the chairman of the Joint Chiefs of Staff, he tells them to cover up the branch of service listed on the name tape, and asks, "What do you have left?" The soldier, Airmen, Marine, or sailor will reply, "U.S." That's right, he says, "It's all about us." I got to experience that "us" feeling first hand when I served in Iraq with my sister services in the summer of 2004.

Even though I got teased for being a "short timer," the Army took great pride in making sure I knew how to clear my weapon, learn the lingo and travel safely in the convoys. It's that sense of family that our leaders want us to cultivate and by working alongside each other, that will come easily. Whether it's talking the same network language or getting joint radios, it's good to see that we're focused on making "us" successful.

LETTER TO THE EDITOR

Unnecessary Risks

While the Common Access Card logon is a positive way to authenticate users, the decision to shut off Outlook Web Access for off-base e-mail access strikes a serious blow to the availability aspect of the Information Assurance triad, particularly for members of the Guard and Reserve.

If there are vulnerabilities with Outlook, then [we] should identify and lock them down. If there aren't any vulnerabilities that might pose a significant security risk, then why are we shutting off access? Everyone in the Air Force who has taken Operational Risk Management knows that Risk=Threat x Vulnerability.

I see an unanticipated consequence of this policy being that Airmen who no longer have access to their relatively secure e-mail may be tempted to use their unsecured commercial e-mail account to conduct official business involving Sensitive but Unclassified or For Official Use Only information, and that is a risk that should not be accepted. Living without access to e-mail while TDY, out of the office, or for those in the Guard or Reserve, is a huge blow to productivity and effective communications. This seems like an unnecessary step backwards.

— Tech. Sgt. Joseph Reuter
California ANG

Col. Steven Hennessy, AFCA Enterprise Capabilities responds: Thanks for the opportunity to answer your question. Indeed, many have expressed similar concern over OWA's temporary unavailability. First, allow us to clarify that OWA is not being turned off. We are working with Microsoft to develop an acceptable security process to allow us to continue to use this tool. Currently, OWA can only be accessed using "user name and password," and does not work with Smart Card Logon. "User name and password" is the second weakest link in our network security chain (humans comprise the weakest link). The DoD has recognized this risk, and therefore directed the full implementation of SCL to improve network security.

Allowing network access through OWA via "username and password" imposes a huge risk across DoD, including ANG and AFRC. Nonetheless, under limited mission-critical conditions we are allowing major commands to identify certain exceptions as required by JTF-GNO mandate.

Yes, we have become accustomed to having our e-mail available at any internet connection. OWA has been a great convenience to those who are TDY or otherwise out of the office. As such, we are working diligently to develop an SCL-enabled solution so we can once again access OWA while maintaining network security. Contact us at afca.ec@scott.af.mil or call DSN 779-5046 (cmcl is 618-229-5046) for more information or details.

JAG IN A BOX

PERSONAL INFO

Is it true that we're prohibited from putting up our personal info on MySpace, Xanga, and sites like that?

Fritz Mihelcic
AFCA Deputy Chief Counsel

You're not prohibited from putting up a Web page or a blog of your own on the Internet, but it's essential that you use good judgment when you do.

If you're in a Joint Ops environment with a variety of soldiers, sailors, Airmen, and Marines, all of the separate information, harmless in itself, as a whole could be pieced together and provide valuable intel to the enemy.

These critical information can be taken from different sites, posts, and blogs providing insight into our collective disposition, morale, forces, infrastructure, or capabilities.

Even if the enemy doesn't find your information, a variety of rules apply to disclosure of information to the public in general, and the "appearance of impropriety" is always a concern. You could be held accountable for violations of these rules.

A wing commander recently released a memo that is exactly on target with some of these "do/don't do" items.

If you would like a copy of that memo for reference, drop us an e-mail and ask!

Send in your question to:
AFCA-JA@scott.af.mil
or call DSN: 779-6060

COMMAND SGT. MAJ. WILLIAM J. GAINEY

SENIOR ENLISTED ADVISOR TO THE CHAIRMAN, JOINT CHIEFS OF STAFF

BIO

- Command Sgt. Maj. Gainey began serving in his current position Oct. 1, 2005 and has 32 years of service.
- He started out as a driver in 1975 and eventually became a drill sergeant and first sergeant.
- He served in Bosnia and Herzegovina and as the command sergeant major for the Multi-National Corps in Iraq.
- He's been to jump master school, air movement officer's course, observer controller course, and Pathfinder school.
- He has an Army captain son and nephew, Air Force nephew and a Coast Guard niece. Also, his first cousin was a Navy Medal of Honor recipient for whom the USS James E. Williams is named.

Serving as the first senior enlisted advisor to the Chairman of the Joint Chiefs of Staff is a man who could be described as part Major Payne, part General Patton.

Like the movie personna who in the opening scene goes to a wounded Marine and says, "Want me to take your mind off your pain?" and then promptly breaks the Marine's finger, Command Sgt. Maj. William "Joe" Gainey has been known to make sure his soldiers can make it through tough situations.

Such was the scene during an encounter in Bosnia when a young sergeant was shot at point blank range and yells "I'm hit, I'm hit!" The sergeant major runs to his side and asks him, "Son, can you squeeze my hand?" The young soldier says yes and grabs onto him tight. The sergeant major quips, "Shoot, you're gonna be all right!" and leaves to check on his other troops. It was at that very moment that the young soldier knew he would be OK, he would later recall.

And, like General Patton, the sergeant major has earned a reputation for discipline and brutal honesty, while maintaining a South Carolinian sense of country humor. Approachable but not familiar, people always know where they stand when they work for or with him ... and they're sure to get an earful of advice.

That must be part of the reason Gen. Peter Pace hired him to take on the challenge of helping to integrate the services and look after the welfare of servicemembers. It's been a year of eating bugs in Africa, doing push-ups with Airmen in Illinois, touring ships and aircraft and tanks, and speaking to thousands. Through it all, he reports that morale is high because of strong leadership and open communication, and that "we're all learning how to operate better with each other." — *Karen Petitt, Managing Editor*

QUOTES

When I speak with servicemembers, I ask them to take their fingers and cover up their branch of service (on the nametape). I ask, "What do you have left?" They answer, "U.S." I tell them, "That's right — us."

★

Lack of combat service, does not mean that someone is not totally involved in this war.

★

I'll give you an honest answer, even if it hurts your feelings.

★

Be as hard as woodpecker lips, but don't lose your sense of compassion.

★

Sharing information — the bad as well as the good — enables troops to build trust in their leaders.

★

Failure is not an option (in the war). We need to know that everyone is doing their part, and they need to feel appreciated for doing it.

GEN. PETER PACE

CHAIRMAN, JOINT CHIEFS OF STAFF

BIO

- Gen. Pace is the 16th CJCS to serve, and is the first Marine. He was sworn in Sept. 30, 2005.
- He's a 1967 graduate of the U.S. Naval Academy, and served in Vietnam upon graduation.
- His overseas command billets include Thailand, Korea and Japan. He also served as deputy commander and then commander, Joint Task Force, Somalia, from 1992-1994.
- Before serving as the CJCS, he served as the vice chairman, JCS for almost four years, and before that, commander of U.S. Southern Command.
- He was born in Brooklyn, N.Y., to Italian-American parents and raised in Teaneck, N.J.

For additional stories see **www.defenselink.mil** and **www.jcs.mil**

The will of the United States is the only question in whether the nation's efforts in Iraq and Afghanistan will succeed, said the chairman of the Joint Chiefs of Staff, Marine Gen. Peter Pace.

This is just one of the many messages the general advocates on behalf of the president to the nation.

"The American military fights the wars that the nation wants us to fight," he said. "The American people's will is a very important part of that. I have faith in the American people's ability to find the right boundaries."

Assuring servicemembers that their country is still very supportive of them is a key focus when he goes out to visit the troops, such as when he did recently in Afghanistan and Iraq.

Americans must understand that this is a long war, he said, and it is not of U.S. choosing.

"Our walking away would not stop the enemy from following us home. Al Qaeda extremists have been very explicit in their aims; they want their ideology to triumph, and they want the freedoms and liberty personified by the United States to end."

The chairman said a dialogue about U.S. involvement in the war is important, "but there shouldn't be one about whether we will defend ourselves," he said. "As a nation, our enemies must know we will do this as long as it takes. We fought the Cold War for 50 years, we'll fight this one for 50 years if we have to."

Winning the War on Terror is the chairman's top priority, along with strengthening the joint warfighting capabilities. Also topping his priority list is focusing on tranformation issues and improving quality-of-life areas for servicemembers and their families. — *Jim Garamone, AFPS, and Karen Petitt, Managing Editor*

QUOTES

The problem (in Iraq) is not so much how much combat power you have in a country, it's more how is the governance going.

★

The only way we can lose is if we decide that we just don't want to do it. And if we decide that, that would not end the involvement, it would simply shift it from its current battlefield in Iraq and Afghanistan to our home.

★

(When serving in a combat unit) you end up with a love of your fellow man that is a different kind of feeling than you experience any place else. (It comes from) when your life is in their hands and their lives are in yours. When you lose somebody like that, it just has an impact on you — and rightfully so — that is life-defining."

DEPLOYABLE JOINT COMMAND & CONTROL

Leaders test war scenarios for warfighter support

By Maj. Mark Chafe
Air Force Test Director

DAVIS-MONTHAN AIR FORCE BASE, Ariz. —Test team members representing all four services recently completed the initial operational testing of the new Deployable Joint Command and Control system.

DJC2 provides regional combatant commanders with a standardized, scalable, deployable C2 command center to support Joint Forces Command's Standing Joint Forces Headquarters initiative.

The new C2 setup provides almost everything imaginable a joint headquarters warfighter could want or need to execute the mission while supporting more than 60 users.

The system consists of networks that include Joint Worldwide Intelligence Communications System, NIPRNET and SIPRNET, Combined Enterprise Regional Information Exchange System. It also includes capability for top secret intelligence processing suites, Global Broadcast Service for data and video feeds, multiple collaboration tools, secure and non-secure phones and video teleconferencing, common picture displays, tactical radios, Defense Messaging Service, e-mail capability at all security levels, dual satellite communication systems, tactical communications and much more.

8 — 15

READABILITY BASED ON FLESH-KINCAID SCORES

FOG INDEX

A new command and control system that's made for deployed situations and used by all the services is undergoing testing. This new system can be set up within hours of arriving at an austere location.

JARGON WATCH

- **DJCS**: Deployable Joint Command and Control system
- **JWIC**: Joint Worldwide Intelligence Communications System
- **NIPRNET & SIPRNET:** Non-classified and Classified Internet Router Network
- **CENTRIXS:** Combined Enterprise Regional Information Communications System
- **AFOTEC:** Air Force Operational Test and Evaluation Center

In addition, DJC2 deploys autonomously with its own power generation, cooling, and tent structures. It's fully deployable on several C-130s and DJC2 can provide the deployed commander with the capabilities within hours of arriving on-site.

But, before the warfighter gets the system, it must pass operational testing by all four services. The Air Force effort was led by the Air Force Operational Test and Evaluation Center, which is located at Kirtland AFB, N.M. Operational testing was conducted here with support from Southern Command and 612th Air Communications Squadron personnel. The testing involved a simulated terrorist attack scenario developed to stress and access all DJC2 systems in an operationally realistic environment.

"The C2 tools, applications, and connectivity this provides to the deployed commander is incredible," said Capt. Martin Martinez, AFOTEC. "Equally incredible was the effort required to plan and realistically test so many systems and capabilities within one test event."

The data and results from this operational test are being reviewed and assessed and will culminate in a formal report later this year. The report will provide the acquisition authority with data and fielding recommendations.

SETTING UP THE CAMP FOR JOINT TESTING

DEPLOYING JOINT TEAMS WITH WIRELESS NETWORKS

NORFOLK, Va. —U.S. Joint Forces Command continues to improve Web intelligence gathering and communications capability for today's warfighter.

These Web-based secure information systems provide leaders with a superior intelligence infrastructure which continually assesses threats and the nation's ability to dissuade or defeat the enemy.

GCCS-I3's situational awareness

The Global Command and Control System-Integrated Imagery and Intelligence, or GCCS-I3, enhances an operational commander's situational awareness of intelligence.

Ben Hill, who acts as chief of intelligence, plans and programs for the joint warfare concept, explained that GCCS-I3 offers users a standard set of integrated, linked tools and services which give immediate access to imagery and intelligence directly from a common operational picture.

It does this by bringing assessment and battlespace visualization abilities together, via the COP, which provides situational awareness and analysis to joint force commanders. It uses the Web-based portal to push and pull information from the various information sources.

GCCS-I3 also gives users the capability to integrate locally collected tactical imagery, live video stream and other intelligence with national and theater-produced intelligence. Users can manipulate their data screens, and they can change their mapping projections to suit their needs so the individual analyst can modify and change various information.

Wireless for the warfighter

Joint Forces Command has developed a capability to rapidly establish computer networks when joint warfighters move into areas where there's no established communications network.

Wireless for the Warfighter, or W4W, provides an advanced wireless capability to provide faster setup, communication and dissemination of critical data.

James Bohling, W4W project lead, said the W4W solution will ultimately provide 5-10 miles of secure unclassified wireless and secure classified local wireless access so that the warfighter doesn't have to be tethered to a network. Other advantages of W4W include:

- The overall reduction of the JTF communications footprint when deployed;
- a decrease in the amount of time to connect with various parts of a JTF; and
- the expansion of coverage area to network services for individual warfighters.

Bohling said they're looking for a May-June 2007 timeframe to implement W4W.

Net-Enabled Command Capability

USJFCOM's Standing Joint Force Headquarters Directorate is working with the Defense Information Systems Agency to deliver DoD's new principal command and control program called the Net-Enabled Command Capability.

NECC will be based on a Web-enabled, service oriented architecture providing capabilities that support joint force and unit level commanders in the accomplishment of their warfighting mission.

The program will further incorporate emerging technical capabilities based on validated operational requirements to provide the warfighter with the best command and control tools required for successful accomplishment of the mission.

USJFHQ recently hosted a two-day exercise with a group of 16 military and civilian personnel who tested current software and capabilities. One of the benefits discussed was the immediate availability of net-enabled programs versus various pieces of hardware. As these events continue, the results will be compiled and analyzed for DISA. — *Robert Pursell, Nicole Robinson, USJFCOM*

USJFCOM MISSION:

Discover promising alternatives through joint concept development and experimentation

Define enhancements to joint warfighting requirements

Develop joint warfighting capabilities through joint training and solutions

Deliver joint forces and capabilities to warfighting commanders

8 15

READABILITY BASED ON FLESH-KINCAID SCORES

FOG INDEX

The U.S. Joint Forces Command is working to improve command and control elements for warfighters through better networks.

JARGON WATCH

- **GCCS-I3**: Global Command and Control System-Integrated Imagery and Intelligence
- **COP**: Common Operational Picture
- **W4W:** Wireless for Warfighters
- **NECC:** Net-enabled Command Capability
- **SJFHQ:** Standing Joint Forces Headquarters directorate

POSTAL OPS IN SAN FRANCISCO IS TRULY A JOINT EFFORT

The Joint Military Postal Activity-Pacific has been practicing the "joint" concept ever since it was created in 1980. Few people probably even know a small joint services postal unit exists in San Francisco Bay.

The JMPA-PAC supports more than 550 military units worldwide that includes 300,000 military personnel and family members in the Pacific, in addition to other overseas and maneuver forces, ships, and units.

They ensure 55 million pounds of mail gets to and from the U.S. to the Horn of Africa, to Antarctica, from Iraq to Diego Garcia, and all points in between.

All of this is accomplished with only 13 military service members from all four military services and an additional four government civilians.

On any given day, they monitor some 90 flights originating in the United States that carry mail for the troops around the world. Their job is to make sure all mail processed by USPS employees moves as quickly as possible, normally in less than 24 hours. They're also busy setting up sealift containers for 18 postal locations in the Pacific. More than 7 million pounds of mail annually is sent to APO and FPO addresses.

For the past three years, they've also had a direct impact on seeing deployed troops get the best mail service possible.

They established twice weekly registered mail shipments, and expanded the number of airlines and flights needed to get the troops' mail moving out of the facilities daily. They also track "mail routing instructions" for 240 Navy and Coast Guard ships, mobile marine units, and special military operations units. By working closely with all their partners, they keep the mail moving during rain, snow, sleet—or war. —*Senior Master Sgt. Steven Chase, JMPA-PAC*

COMM SPECIALTY HELPS WITH SEIZURE OF ILLEGAL DRUGS

In just one year, Tech. Sgt. Steven Sparks' management of the frequencies and spectrum in South America indirectly contributed to the seizure of 13,000 pounds of cocaine, 393 pounds of heroin, 107 (short) tons of marijuana, and 2,600 pounds of methamphetamines.

Without communications, and without frequency allocations, there is no way the affected agencies could have seized what they did.

He directly helped the air, ground, and naval forces by providing them the means to speak to one another in the best and safest manner possible.

He transmited the data collected from ground, airborne, and naval sensors and sent it to pre-identified locations to determine the correct action and intervention. Examples of such data include the air picture, ground movement, weather/storm cells, and video teleconferencing, just to name a few.

He has also negotiated with the affiliated countries to ensure their transmissions would not be interrupted. Without spectrum management's involvement in providing a means for communication among drug patrols, massive amounts of drugs could have made it through to America.

Sergeant Sparks was deployed to South America from the 612th Air Communications Squadron, located at Davis-Monthan AFB, Ariz. —*Capt. Lea P. Rogers, 612th ACS*

1ST CS DEPLOYS 'IN PLACE' TO PRACTICE WARTIME SKILLS

Virginia Beach, Va., had a new silhouette flying overhead during July when Langley AFB's runway closure required the wing to temporarily fly 12 of the F-22A Raptors out of Naval Air Station Oceana, a U.S. Navy master jet base flying the F/A-18E/F Super Hornet. The runway closure provided a prime opportunity to exercise the F-22A in a joint environment. It also gave the unit the opportunity to perform its wartime mission without bullets, bombs or mortars.

The 1st Communications Squadron's Combat Systems Flight is one of five lead units that provide Theater Deployable Communications in Air Combat Command. It's their job to deploy anywhere in the world and set up all initial communications for a bare base or perform sustainment operations at established bases.

This capability is achieved through the use of a satellite communications infrastructure that enables the TDC Integrated Communications and Access Package to connect from anywhere in the world back to the U.S. This package provides all secure and non-secure voice and data capabilities to deployed units of up to 3,000 users.

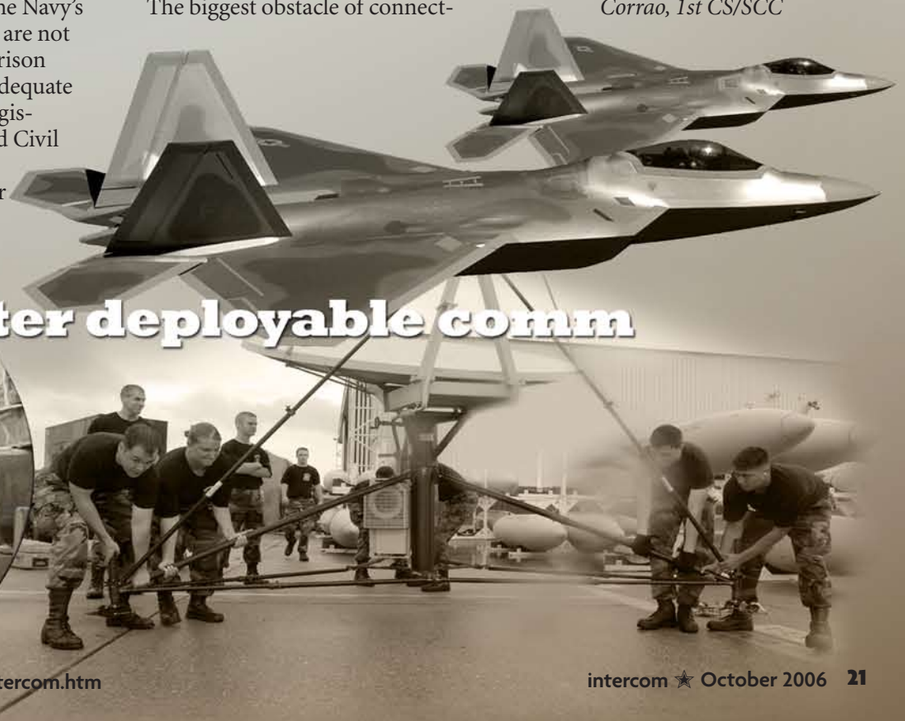
The main difference between the Air Force and Navy is that the Navy's contracted support services are not resourced to provide in-garrison deployed support without adequate funding. The equivalent Logistics Readiness Squadron and Civil Engineering functions that are critical to supporting Air Force operations were not normally manned 24/7. The Navy also contracts out their communications support, which is referred to as the Navy Marine Corps Intranet.

The F-22A is designed with an automated maintenance system called the Integrated Maintenance and Information System. IMIS essentially receives maintenance information from the jet and processes it at a local server. This local server then uploads the data to a parent server located at Langley AFB, allowing supply and other systems to take action when needed.

This system also provides a full record of maintenance for each aircraft. With network access to the server at Langley, the maintainers have access to this information anywhere the jets deploy. This unique requirement for the F-22A support systems to maintain connectivity with its host base from wherever it deploys is an integral piece for communications planners to consider when working with or expecting F-22As at any potential location in the future.

The biggest obstacle of connecting IMIS to the NMCI was obtaining connectivity, both technically and contractually. Because it's a contract, it required a statement of work to even begin exploring how this would be done and how much it would cost. The lead time of this was too long to meet the Raptor's arrival date. Leasing lines was not an option because security requirements mandated by the program office and lead time to obtain interim approval would have also been too long. This left the team with their deployable communications equipment as the only viable option.

This was the first time current members of the flight had the chance to deploy with some of their new equipment. Finding a good grounding point and placement of the USC-60A satellite dish to "see around the hangars and not face the runway" turned out to be a challenge as well as moving F-18 fuel pods so they could set-up tents. Both the Air Force and Navy remained flexible, allowing the team to be fully operational before the jets arrived. — *Capt. Mark Corrao, 1st CS/SCC*



postal in the city

spectrum management

theater deployable comm

U.S., BRITISH TROOPS CREATE MANUAL FOR CONNECTIVITY

Airmen from the 5th Combat Communications Group (Robins AFB, Ga.) and the Royal Air Forces' 90th Signals Unit recently completed their third annual United Architecture exercise.

Collectively, 47 Airmen created an interoperability manual that enables interconnectivity between the American and British tactical communications equipment.

This exercise validated their ability to extend U.K. resources within the infrastructure of a deployed location. The ability to pull U.K. trunks through a U.S. Standardized Tactical Entry Point facility proved a huge success. This capability significantly reduced the amount of equipment and personnel needed to deliver command and control to the warfighter.

Flight Lieutenant Keith Cranswick, a RAF exchange officer assigned to the 5thCombat Communications Support Squadron, said, "Integration of the two satellite systems was a first for the two countries." This effort enables both services to receive accreditation for the technical solutions, and provides coalition commanders with the ability to communicate with their forces without deploying additional personnel or resources.

The purpose of the exercise was to come up with a solution for interconnecting USAF and RAF communications equipment in a way that would provide reliable communications for each country's warfighters. Decreased airlift requirements would save both services money. The participants tested a redundancy solution by establishing a communications link between the two country's STEP sites. Interfacing standards were overcome with equipment pin outs and custom designed cables. *—Capt. Stephen D. Hoffman, 54th CBCS*

AF TO FIELD JOINT TACTICAL RADIO SYSTEMS

Joint interoperability is in increasing demand among Air Force warfighters. Now, with the delivery of a supportable and sustainable Joint Tactical Radio capability, the Air Force is one step closer to that goal.

In September, the Electronic Systems Center (Hanscom AFB, Mass.) with assistance from the Air Force Command and Control and Intelligence, Surveillance, and Reconnaissance Center (Langley AFB, Va.) contracted for more than 1,200 single-channel handheld radios to units across the Air Force.

The fielding, expected to begin in November, also includes programming software, battery chargers, spare batteries, cables, and a logistics plan that includes a warranty, depot support plan and user training.

During the past several years, the AFC2ISRC JTRS Lead Command office conducted numerous data calls to document both airborne and ground requirements for the radios and consolidated them in a migration plan. Based on information in the plan, the first radios will go to air support operations squadrons, Security Forces and Civil Engineering Explosive Ordnance Disposal units.

This year's fielding is the first installment of what will be a multi-year process. The focus for the next few years will be distributing 15,000 JTRS single-channel handheld radio systems. The handheld systems include vehicle adapters, base stations and repeaters. Delivery of a system, as opposed to just a radio, will offer versatile operating applications while increasing communications range.

"This is a capability long overdue, as we've seen many urgent requests and forced redistribution of assets over the past few years in Afghanistan and Iraq," said Mike Jordan, Deputy Chief of the Warfighter Infostructure Division. "Due to lower per unit costs, we'll be able to field more systems earlier with available funding and in the end everybody wins." *—AF JTRS Lead Command Office*

COMBAT COMM REQUIRES READINESS POSTURE, TRAINING

As we fight the Global War on Terror, combat communications stands ready to deploy at a moments' notice; anywhere, anytime, in any environment.

Training to meet this mission, and deploy into a myriad of possible scenarios, requires a readiness posture like no other in the communications arena. The nucleus of this readiness posture comes from extensive training as taught in the Combat Communications Readiness School. Students train safely, train hard, and then deploy to provide outstanding communications support to the warfighter.

How does an organization of more than 700 Airmen train to meet any communications requirement in virtually any situation? At the 5th Combat Communications Group, affectionately known as the 5th "MOB" from when the group was called the 5th Mobile Communications Group, they prepare in two main ways—realistic combat training and focused technical instruction.

Every new member to the 5th MOB completes a three-week Combat Skills Readiness Course that focuses on surviving in a hostile environment. This training covers 19 combat-related disciplines including basic survival, site defense, tactical convoys, land navigation, and most importantly combat leadership.

"In addition to a demanding academic schedule, we focus on developing leadership and fostering teamwork among the students," said Master Sgt. James "Pappy" Hill, the school's Superintendent and one of two security forces instructors assigned to the group. "Our goal is for every student to leave with the confidence and motivation to handle any combat environment." Skills learned in the class are tested during a rigorous 4-day field exercise where students must build and defend a simulated airbase. The 5th MOB uses a trained cadre of opposing forces to role-play an array of realistic scenarios from angry locals to hostile Special Forces.

The second training focus is with the specialized communications equipment the Air Force uses in the expeditionary environment. Through the group's Systems Learning and Integration Center, Airmen learn fundamentals of installing, operating and troubleshooting tactical communications equipment.

The strength of the center is its ability to train on actual equipment, and advanced training on network management and security software. They also provide Just-In-Time training for communications warriors who require essential qualifications prior to deployment. Enrollment in the SLIC is open to any communicator seeking tactical communications education. For more information or to enroll in any of the classes, call DSN 468-2221.

—Maj. James Sahm and Capt. Jason Hicks, 5th CBCS

LEBANON EVACUATION

A U.S. Navy landing craft air cushion departs the Lebanon shore after picking up American citizens July 22. At the request of the U.S. Ambassador to Lebanon and at the direction of the Secretary of Defense, the United States Central Command and elements of Task Force 59 assisted with the evacuation.

Navy photo by Mass Communication Specialist 1st Class Robert J. Fluegel

Airman 1st Class Jarod Lambert, a loadmaster with the C-17, transits through Ramstein AB, Germany, where evacuees will catch a flight to the United States.
Staff Sgt. Stacy Pearsall / 1st CTCS

The sustained endeavors of the State Department, U.S. embassies and several military units helped more than 15,000 Americans depart Lebanon from July 16 through Aug. 2.

Airman Lambert passes out candy to children being evacuated.
Staff Sgt. Stacy Pearsall
1st CTCS

Marines assist American citizens from Beirut onto a waiting landing craft July 21. Navy photo

TIME MACHINE

Communicators take a cue from balloons to bring a new radio repeater platform capability.

NEAR SPACE

TODAY'S WARFIGHTER REAPING BENEFIT OF OLD-SCHOOL THINKING

By 1st Lt. Elizabeth Kreft
2006 Joint Expeditionary Force Experiment
Public Affairs

NELLIS AIR FORCE BASE, Nev. — History can be a great teacher, and today's technology can often be the missing ingredient to experimental recipies that have failed in the past. Sometimes, yesterday's ideas may just need a little tweaking to make them the next big thing in the world of gadgets and gizmos.

Since the Civil War, unmanned balloons have been used in various capacities. During WWII, Japan landed more than 200 bomb-carrying unmanned paper balloons in North America. By the end of July 1945 nearly 230 of the dangerous balloons or their exploded remnants had been found. They fell from Alaska to Mexico and as far east as Michigan.

Although the Japanese balloons weren't successful at blowing up their intended targets, the idea of using balloons as a military platform is relevant even in today's military.

Warfighters who depend on ground communications for mission success will soon have improved technology, thanks to a system under examination.

Combat Skysat uses balloons to take advantage of untapped airspace and improve line-of-sight ground communications.

"The former Air Force Chief of Staff, General (John P.) Jumper, wanted to explore the 'near space' realm," said Maj. Shawn Bratton, 111th Space Operations Squadron detachment commander. "Between where the satellites live and where the planes fly is a chunk of space where nothing is operating."

Skysat is a radio repeater platform launched into near-space. It's attached to what can be compared to a weather balloon and can transmit information hundreds of miles farther than traditional radios. Cruising altitude is between 65,000 and 95,000 feet.

Hilly terrain or thick walls in an urban environment can weaken radio transmissions, but if the signal is bounced off an aerial platform, it not only allows for clearer transmissions, it extends communication range.

"The standard ground radio range is roughly five to 10 miles, but with Combat Skysat, warfighters can exchange information over more than 600 miles," Major Bratton said.

"Communication is imperative to a special operations team," said 1st Lt. Rodger Jennrich, special tactics officer with Air Force Special Operations Command. Lieutenant Jennrich is one member of the JEFX Combat Skysat examination team, and he says what he's seen so far is an outstanding improvement.

"Skysat will offer operators a variety to their communications package, which will allow us to get information back faster," Lieutenant Jennrich said.

Additionally, ground operators won't have to carry two antennas to achieve long-range contact.

"Instead of having to switch out between the satellite antenna and the UHF antenna, we'll be able to just use the one, which obviously makes life easier," Lieutenant Jennrich said. "We shoot, move and communicate, so this new tool will give our people another way to get information where it needs to go."

NEWS BRIEFS

INNOVATION

AF EXPERTS DEMO AUTO ID TECHNOLOGY

AIR FORCE Materiel Command members are taking advantage of Automatic Identification Technology and finding ways to improve it.

Logistics and depot maintenance experts demonstrated some tracking technology projects during an AIT showcase attended by senior AFMC representatives.

The August showcase featured a variety of projects that advance the goals of Air Force Smart Operations 21 within the maintenance and sustainment arena.

"We had a unique opportunity to present our projects to a small, focused senior-level audience and explain the benefits, features and return on investment," said Kelley Beerbower, program manager for depot maintenance automatic identification initiatives in AFMC.

"We were able to give them the right (people) to answer their questions so they can make informed decisions for the future."

AIT is used commercially in a variety of ways. One method is radio frequency identification, or RFID. A radio identification component is a small device attached to a product or piece of equipment that transmits data. Companies use this data to track products, restock inventories or locate equipment.

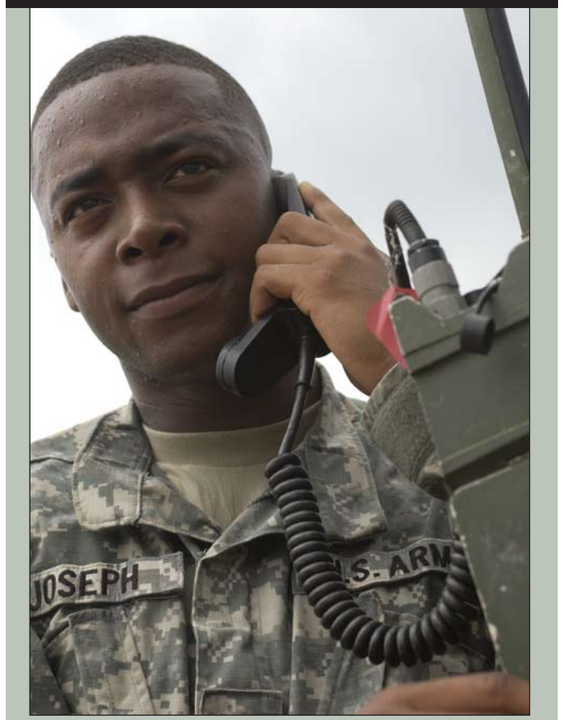
Shipping companies, like United Parcel Service, use bar codes to track deliveries, while also allowing customers to track their shipments through the Internet.

"Each individual box or product containing a bar code no longer has to be individually scanned," said Michael Bigbee, the vice president for federal solutions of GlobeRanger.

"As soon as the products with passive RFID tags are in range of the scanner they are logged into a database," he said.

The passive radio identification technology allows people to track items quicker and more efficiently, which drives down manufacturing costs, reduces inventory and improves processes. — *Capt. Paul Baldwin, AFMC PA*

JOINT CONNECTION



Tech. Sgt. Denise A. Rayder / 1st CTCS

Army Spc. Jamal Joseph, with 20th Engineer Battalion, listens to the radio for instruction at Fort Bragg, N.C., during Joint Forcible Entry Exercise. This is an Army and Air Force training exercise designed to validate combat readiness of leadership, planning staff, aircrews and ground forces through integrated scenario-based training operations.

TRANSFORMATION

CHIEF TALKS RECAPITALIZATION TO AIRMEN

IN HIS LATEST "Letter to Airmen," Air Force Chief of Staff Gen. T. Michael Moseley discusses measures that will shape and transform the Air Force.

General Moseley said Airmen today are engaged in an array of missions from operating satellites in deep space to applying air power in Afghanistan and Iraq.

Gen. Moseley's letter can be found at: www.af.mil/library/viewpoints

"We're working hard to put the right people, plans and programs in place to transform and re-shape the Air Force while continuing to lead the Department of Defense's transformation from an 'industrial' to an 'information' age force — all while heavily engaged in a Global, long War on Terrorism."

NEW FRONTIERS

COMMUNICATORS WIRE OPS IN ROMANIA

THIRTEEN MEMBERS of the 1st Combat Communications Squadron, headquartered at Ramstein AB, Germany, traveled to Romania to support Exercise Viper Lance 2006, a bilateral exercise with members of the Romanian air force.

The exercise, which ran from Aug. 8-25, marked the first time American F-16 Fighting Falcon pilots have trained in the country.

The 1st CBCS is responsible for deployable, short-notice communications and airfield support for U.S. Air Forces in Europe and acts as the main source of deployable communications in USAFE. This means they are sent out to a forward location before follow-on forces arrive.

The communication detachment provided support for an airfield tactical navigation beacon that pilots use for directions and distance, ground-to-air and land mobile radios, and network and phone support for all deployed members.

After Romania joined the North Atlantic Treaty Organization in the mid-1990s, the Romanian air force and its MiGs became allies with the United States. — *Senior Airman Eydie Sakura, 22nd EFS PA*

KUDOS

COMMUNICATOR RECOGNIZED FOR LEADERSHIP, ACADEMIC ACCOMPLISHMENTS

CHIEF MASTER SGT. KENNETH "MIKE" IVEY, a satellite, wideband, and telemetry systems technician, and a 2006 Information Resource Management program graduate, was awarded the Air Force Institute of Technology's Lt. Edwin E. Aldrin Sr. Award. This award is the institute's top leadership award and is given to the graduating student who has displayed exceptional leadership characteristics, and demonstrated high-quality academic accomplishments, military decorum, and the ability to work with faculty and fellow students. This is the first time an enlisted student has been awarded this honor. Chief Ivey also holds the distinction of being the first enlisted student at AFIT to be promoted to Chief Master Sergeant while in-residence.

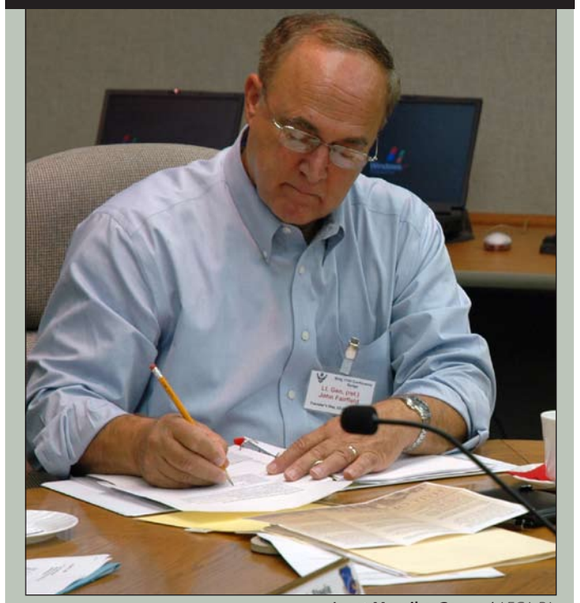
Chief Master Sgt. Kenneth Ivey

IN SEARCH OF FIBER

Master Sgt. John E. Lasky / DET 4 AFNEWS

Airman 1st Class Jeremi Welborn searches for a fiber optic cable as Airman Kenneth Townsend waits to assist outside a manhole at Ramstein AB, Germany. Both Airmen are cable maintainers with Ramstein's 435th Communications Squadron.

STILL SERVING



Janet Moreiko-Gagen / AFCA PA

Retired Lt. Gen. John Fairfield, who led the comm community in the mid '90s, was one of several communications leaders the Air Force Communications Agency hosted during its first Founders Day in August. The agency hosted the event to strengthen the Communications and Information Hall of Fame nomination process. This heritage endeavor also offered opportunities for lively discussions about Air Force pioneers and visionaries. General Fairfield (a command pilot with more than 180 combat missions over Vietnam) was inducted into the Hall of Fame in 2003.

FINAL CHAPTER

MISSION COMPLETE IN NEBRASKA

THE 55TH MOBILE Command and Control Squadron, located at Offutt AFB, Neb., closed its doors Sept. 27 celebrating a mission that started more than 28 years ago.

Squadron members, known as "Reapers" provided a survivable command and control capability for United States Strategic Command in support of the nation's nuclear warfighters.

Originating in 1978 under the then classified "Ghost Hollow" program, it first belonged to USSTRATCOM and originally consisted of only a few vans with radio gear.

Through the years the platform transitioned from a "radio wave" backbone to a full-blown computer network backbone.

The 55th MCCS participated in more than 40 operational tests and evaluations each year. These included national-level communications exercises, global nuclear command and control exercises and unit field training and joint staff evaluations.

Since 2004, the squadron sustained a 99 percent platform uptime rate in a tactical environment.

Although the Reapers will no longer support USSTRATCOM's mission, their spirit will echo throughout Air Force history. — *Capt. Shawn Bendig, 55th MCCS*

MASTERS PROGRAM

FOCUSING ON THE 'I' IN IT

THE INFORMATION Resource Management graduate program is an 18-month, in-residence master's degree program offered at the Air Force Institute of Technology, Wright-Patterson AFB, Ohio. In existence since the late '80s, the program is experiencing renewed interest, especially as joint operations grow increasingly dependent upon the capabilities provided in a knowledge-intensive, net-centric environment.

Today's curriculum provides a broad perspective of Air Force and Department of Defense information-related topics such as enterprise information architecture, strategic information management, information security and information ethics, to name a few. The program is open to all AFSCs, both enlisted and officer.

Requirements of the IRM program include successful completion of 10 core courses, a concentration sequence of three to four courses, and a thesis. Students who complete the IA concentration sequence are also awarded the NSA NSTISSI for Information Systems Security Certificate.

Those interested in the program should go to: www.afit.edu/en/env/degrees.htm and click on 'Course Guide.'

JPADS puts supplies on target in the

DROPZONE

What is it?

In development between the Army and Air Force since 1993, the Joint precision Airdrop System, or JPADS, is a Global Positioning System that steers cargo to its intended dropzone with pinpoint accuracy.

This family of systems is designed to bring the same accuracy to the airlift community that strike pilots have enjoyed since the development of GPS-guided bombs.

Why do we need it?

The Army and Air Force are resupplying small units, so they don't need a big volume of parachutes and equipment. JPADS allows aircrews to get into remote regions from a stand-off distance, where the aircraft is out of harm's way.

How does it work?

Prior to dropping the cargo, a C-130 loadmaster will pitch a small transmitter called a dropsonde from the back of the aircraft, which relays wind speeds and direction back to the navigator's laptop computer.

With JPADS, navigators can now gather up-to-the-minute information about wind direction and speed, then, because the loads steer themselves, they can fly to an area over the drop zone to release the cargo as opposed to a single point.

In addition to accuracy, JPADS allows different bundles to steer themselves to more than one drop zone.

Under traditional airdrop procedures, C-130 navigators guide the aircraft's pilots to a single point in space to take advantage of forecasted winds to blow unguided loads to a drop zone as the cargo descends.

Because the winds are forecasted, they may not be the same by the time the aircraft actually arrives.

With JPADS, parachutes are autonomously steered by GPS and electro-mechanical steering actuators. The actuators pull risers on a parachute — turning it one direction or another — to position the load over the desired point of impact.

Once the load is positioned over the drop zone, a second parachute deploys and the cargo descends almost straight down to troops on the ground.

What's ahead?

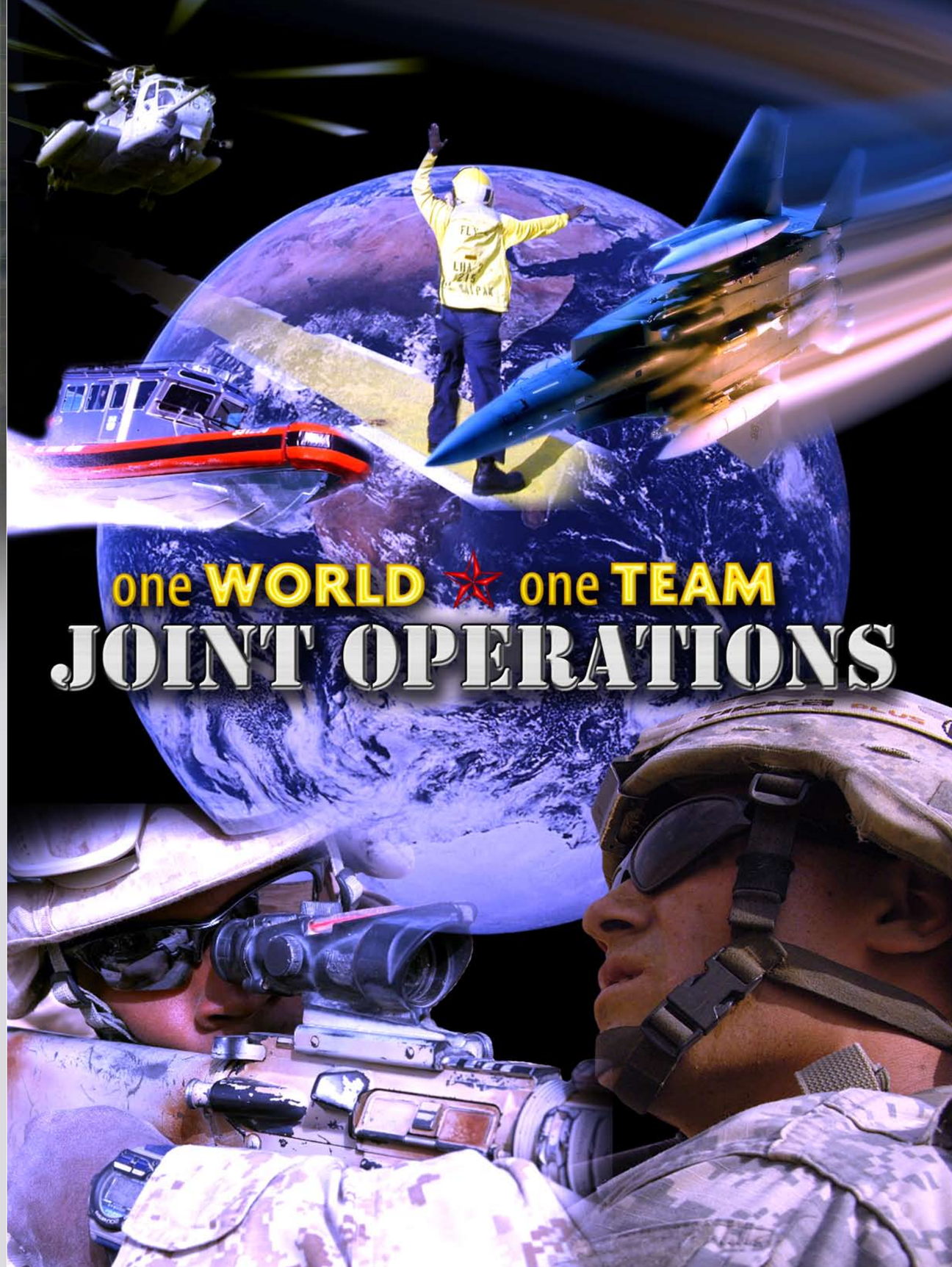
The goal, when the system is fully developed, is to field four sizes of JPADS — extra light, light, medium and heavy.

Though still in the concept-development phase, the heavy JPADS may be able to airdrop up to 60,000 pounds of cargo, more than enough to deliver the Army's eight-wheel Stryker combat vehicle.

Source: Maj. David Kurle, 455th AEW PA

Maj. Russ Hedden, a navigator with the 774th Expeditionary Airlift Squadron, looks over the Joint Precision Air Drop System mission planner computer while on an airdrop mission over Afghanistan.

Senior Airman Brian Ferguson / AFNEWS



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Journal of the Air Force C4ISR community ★ October 2006

JOINT OPERATIONS

PHOTO ESSAY ★ JOINT LEADERS ★ JOINT C2

JOINT FORCES COMMAND ★ JOINT POSTAL OPS

JOINT CONNECTIVITY ★ JOINT TACTICAL RADIO

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